

-1- (JAPIO)

TITLE  
PATENT APPLICANT  
INVENTORS  
  
PATENT NUMBER  
APPLICATION DETAILS  
SOURCE  
  
INT'L PATENT CLASS  
JAPIO CLASS  
ABSTRACT

ALKALINE CELL  
(0000000) ARUKARI KANDENCHI GIJUTSU KENKYU KUMIAI  
SHINODA, KENICHI; OOTA, HIROHIKO; MAEDA, YOSHIHIRO;  
TANAKA, YUZO; TSUTSUI, KIYOHIDE  
87.05.15 J62105365, ~~JP 62-105365~~  
85.11.01 85JP-246049, 60-246049  
87.10.12 SECT. E, SECTION NO. 548; VOL. 11, NO. 312,  
PG. 111.  
H01M-004/06; H01M-004/42  
42.9 (ELECTRONICS--Other)  
PURPOSE: To suppress generation of hydrogen gas  
caused by formation of a local cell due to a  
potential difference between different types of metal  
sufficiently even in case of amalgamation lower than  
3wt% by arranging a micro particle layer near the  
current collecting face of negative electrode.  
CONSTITUTION: A negative electrode is formed of a  
micro particle layer composed of fine zinc powder and  
a rough particle layer composed of coarse zinc powder  
where the micro particle layer is arranged near the  
current collecting face of the negative electrode.  
The micro particle layer composed of fine zinc powder  
is arranged near the current collecting face of the  
negative electrode, thereby the contacting area of  
zinc powder against the current contacting face of  
the negative electrode is increased and the total  
quantity of mercury to be transferred to the current  
collecting face of the negative electrode is  
increased so that the current collecting face of the  
negative electrode is amalgamated uniformly and  
sufficiently even if the amalgamation is lower than  
3wt% or 2wt%. While when employing a rough particle  
layer for the remaining section, the total surface  
area of zinc powder in the negative electrode is  
controlled so that it is possible to suppress the  
volume of gas to be produced through corrosive  
reaction of zinc powder to same level with  
conventional cell.

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